

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

*(Only for new non-provisional  
applications under 37 CFR 1.53(b))*

Title of Invention

**Adaptive Noise Filtering and Equalization for  
Optimal High Speed Multilevel Signal Decoding**

Named Inventor(s)

**Andrew Joo Kim; Vincent Mark Hietala; and  
Sanjay Bajekal**

Attorney Docket

**07982.105018**

Express Mail Label No.

**ER 166436765 US**

**APPLICATION ELEMENTS**

1. ☒ Fee Transmittal Form  
*(Submit an original, and a duplicate for fee processing)*
2. ☒ Applicant claims small entity status. See 37 CFR 1.27.
3. ☒ Specification, Claims,  
and Abstract Total Pages **23**
4. ☒ Drawings Total Sheets **11**
5. ☒ Oath or Declaration Total Pages **3**
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from prior application (37 CFR 1.63(d))  
*(for continuation/divisional with Box 17  
completed)*
    - (i) ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting  
inventor(s) named in the prior  
application, see 37 CFR 1.63(d)(2)  
and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76.
7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program *(Appendix)*
8. Nucleotide and/or Amino Acid Sequence  
Submission *(if applicable, all necessary)*
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ paper
  - c. ☐ Statement verifying identity of above  
copies

Commissioner for Patents  
**ADDRESS TO:** Mail Stop Patent Application  
P.O. Box 1450  
Alexandria, VA 22313-1450

**ACCOMPANYING APPLICATION PARTS**

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement  
*(when there is an assignee)*
  - ☐ Power of Attorney by assignee
11. ☐ English Translation Document *(if applicable)*
12. ☐ Information Disclosure Statement (IDS)  
PTO-1449
  - ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
*(Should be specifically itemized)*
15. ☐ Certified Copy of Priority Document(s)
16. ☒ Assignee: Quellan, Inc.  
250 14th Street, N.W.  
Atlanta, Georgia 30318
19. ☐ Other: \_\_\_\_\_

17. If a **CONTINUING APPLICATION**, check appropriate box and supply the requisite information:
- ☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: \_\_\_\_\_
- Prior application information: Examiner: \_\_\_\_\_ Group/Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 5b, is considered as being part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**18. CORRESPONDENCE ADDRESS:**

Steven P. Wigmore, Esq.  
KING & SPALDING LLP  
45<sup>th</sup> Floor  
191 Peachtree Street, N.E.  
Atlanta, Georgia 30303

By: [Signature] Reg. No. 40,447  
Date: July 15, 2003  
Telephone: 404.572.4600  
Facsimile: 404.572.5145  
Customer No. 20786



# FEE TRANSMITTAL

Attorney Docket No. 07982.105018  
Express Mail Label No. ER 166436765 US

This sheet accompanies a patent application transmittal for the following application:

Inventor(s): **Andrew Joo Kim; Vincent Mark Hietala and Sanjay Bajekal**  
Filing Date: **July 15, 2003**  
Title: **Adaptive Noise Filtering and Equalization for Optimal High Speed Multilevel Signal Decoding**

The filing fee is calculated as shown below:

## 1. FILING FEE:

FOR:	SMALL ENTITY		LARGE ENTITY	
	FEE	FEE PAID	FEE	FEE PAID
<input checked="" type="checkbox"/> UTILITY FILING FEE	\$375	375.00	\$750	
<input type="checkbox"/> DESIGN FILING FEE	\$165		\$330	
<input type="checkbox"/> PLANT FILING FEE	\$260		\$520	
<input type="checkbox"/> REISSUE FILING FEE	\$375		\$750	
<input type="checkbox"/> PROVISIONAL FILING FEE	\$80		\$160	
SUBTOTAL (1)		\$375.00		\$xxx

## 2. CLAIMS:

FOR:	NO. FILED	NO. EXTRA	SMALL ENTITY		LARGE ENTITY	
			RATE	FEE	RATE	FEE
TOTAL CLAIMS	32 - 20 =	12	12 x 9 =	108.00	x 18 =	
INDEP. CLAIMS	4 - 3 =	1	1 x 42 =	42.00	x 84 =	
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENTED			+140 =		+280 =	
SUBTOTAL (2)				\$150.00		\$xxx

## 3. ADDITIONAL FEES:

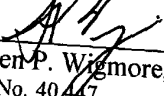
FOR:	SMALL ENTITY		LARGE ENTITY	
	FEE	FEE PAID	FEE	FEE PAID
<input type="checkbox"/> LATE FILING, FEE OR OATH	\$65		\$130	
<input type="checkbox"/> NON-ENGLISH SPECIFICATION	\$130		\$130	
<input type="checkbox"/> OTHER				
SUBTOTAL (3)		\$xxx		\$xxx

TOTAL FILING FEES: \$525.00

A check is enclosed for the total amount: \$525.00

☒ Charge any additional fees required under 37 C.F.R. 1.16 or 1.17 to Deposit Account 11-0980.

KING & SPALDING LLP  
45<sup>th</sup> floor  
191 Peachtree Street, N.E.  
Atlanta, Georgia 30303  
Telephone: 404.572.4600

By:   
Steven P. Wigmore, Attorney for Applicant  
Reg. No. 40,447

Date: July 15, 2003

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